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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/689,263	10/11/2000	Milan Mrksich	7814/42	8463

757 7590 04/23/2002

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EXAMINER

NAFF, DAVID M

ART UNIT	PAPER NUMBER
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1651

DATE MAILED: 04/23/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/089263

Applicant(s)

Mitsubishi et al

Examiner

1/08/02

Group Art Unit

1651

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 1/14/02
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-58 is/are pending in the application.
- Of the above claim(s) 1-18, 37-40 + 45-48 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 19-36, 41-44 + 49-58 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 7 figs 2/25/02
- ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

In a response of 1/14/02 to a restriction requirement of 12/13/01, applicants elected the Group III claims 19-36, 41-44 and 49-58 without traverse.

Claims 1-18, 37-40 and 45-48 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 6 (filed 1/14/02).

Claims examined on the merits are 19-36, 41-44 and 49-58.

The following is a quotation of the first paragraph of 35 U.S.C.

10 112:

15 The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 19-36, 41-44 and 49-58 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for formula (1) and (5), does not reasonably provide enablement for enantiomers of the formula. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

25 The specification fails to disclose an enabling procedure for making specific enantiomers of the formula.

The following is a quotation of the second paragraph of 35 U.S.C.

112:

30 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19-36, 41-44 and 49-58 are rejected under 35 U.S.C. 112,
second paragraph, as being indefinite for failing to particularly point
out and distinctly claim the subject matter which applicant regards as
5 the invention.

The meaning and scope of "enantiomers" is uncertain. It would be
uncertain as to compounds that are enantiomers of formula (1) and (5).

In formula (5) of claim 19, "Surf" has not been defined.

Claims 41-44 are unclear by being dependent on a nonelected claim.

10 The following is a quotation of 35 U.S.C. 103(a) which forms the
basis for all obviousness rejections set forth in this Office action:

15 (a) A patent may not be obtained though the invention is not identically disclosed or
described as set forth in section 102 of this title, if the differences between the
subject matter sought to be patented and the prior art are such that the subject
matter as a whole would have been obvious at the time the invention was made to a
person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering
patentability of the claims under 35 U.S.C. 103(a), the examiner presumes
20 that the subject matter of the various claims was commonly owned at the
time any inventions covered therein were made absent any evidence to the
contrary. Applicant is advised of the obligation under 37 CFR 1.56 to
point out the inventor and invention dates of each claim that was not
commonly owned at the time a later invention was made in order for the
25 examiner to consider the applicability of 35 U.S.C. 103(c) and potential
35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 19-36, 41-44 and 49-58 are rejected under 35 U.S.C. 103(a) as
being unpatentable over Mrksich et al (A18) in view of Hodneland et al

(A7), Houseman et al (A9) and Sigal et al (A25), and if necessary in further view of Deng et al (A3) or Hodneland et al (A8).

The claims are drawn to substrate containing alkanethiolate moieties of formula (5) or an alkanethiol moieties of formula (1) on a surface of gold, and to chip containing the substrate and cells.

Mrksich et al (A18) disclose using alkanethiol or alkanethiolate moieties on a surface of gold as a substrate for proteins or cells.

Hodneland et al (A7), Houseman et al (A9) and Sigal et al (A25), and if needed Deng et al (A3) or Hodneland et al (A8) disclose alkanethiol or alkanethiolate moieties having different groups for adhering protein or cells to a gold surface.

It would have been obvious to select preferred groups for the alkanethiol or alkanethiolate moieties of Mrksich et al in view of the different groups disclosed by Hodneland et al (A7), Houseman et al (A9) and Sigal et al (A25), and if needed Deng et al (A3) or Hodneland et al (A8) contained by alkanethiol or alkanethiolate moieties.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 19-36, 41-44 and 49-58 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-117 of copending Application No. 09/923,760 or claims 1-41 of copending application 09/797,166. Although the
5 conflicting claims are not identical, they are not patentably distinct from each other because the presently claimed alkanethiolate moieties of formula (5) or an alkanethiol moieties of formula (1) and their uses would have been obvious from the similar moieties of the claims of the copending applications.

10 This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Naff whose telephone number is (703) 308-0520. The examiner can normally be reached on
15 Monday-Thursday and every other Friday from about 8:30 AM to about 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, a message can be left on voice mail.

If attempts to reach the examiner by telephone are unsuccessful, the
20 examiner's supervisor, Mike Wityshyn, can be reached at telephone number (703) 308-4743.

The fax phone number is (703) 872-9306 before final rejection or (703) 872-9307 after final rejection.

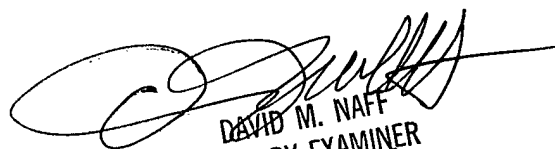
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

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DMN
4/22/02


DAVID M. NAFF
PRIMARY EXAMINER
ART UNIT 1651